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BULBS FOR FALL PLANTING

a catalog of



Daffodils, Tulips, Freesias, Hyacinths, Amaryllis, Clivias, Gladiolus,
Orchids, and Many Others for Fall Planting.

and

How to Grow Them in House or Garden

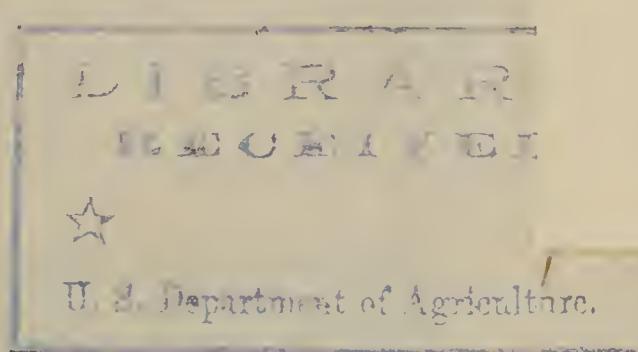
FALL 1938

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La Verne, California

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1825 N. Capitol St.
Washington, D. C.



A HIGH HAT OFTEN COVERS A SOFT HEAD

A Personal Letter to You

Dear Floral Friends:

This letter is meant to be a personal letter to you and I shall speak personally. I get very many friendly and personal letters from customers. The friendly relationship pleases me as well as my "silent" (?) partner, Ethel.

Fortunately only a relative few require a direct answer. That is a point to remember. Before asking questions read the catalog carefully. They may be answered there. Even our "relative few" sometimes mean nearly a day's work. But we are glad to help always.

Your letters also often give valuable information about culture and hardiness of bulbs. One from New Jersey tells about growing Alstromerias and leaving them in the ground for years. One from a Wichita, Kansas lad has found Crinum Cecil Houdyshel hardy there. I would like to have many more reports on these experiences.

You may have noticed that I sometimes choose a topic for my "personal letter." This time it is, "A high hat often covers a soft head." This is as much a reminder to myself as to any one else. It has many applications.

When one fails to accomplish a plan there is a tendency to blame some one or something else instead of trying to determine one's own error. This human trait is a great handicap to personal improvement. It is not very important to save one's face, to wear a high hat. People who assume a superior air are not as well liked as those who are frankly human and subject to error. It is better to try to find one's error and correct it.

There are many who overestimate the value of their own work or their handiwork, the importance of their efforts, the poem they wrote, the beauty and intelligence of their children, the flower they created, their discovery or invention. They belittle the work of others and assume a superior air, wear high hat.

Once a plant breeder said to me, pointing to one of my originations, "I ave plants that make that look like a weed." It hurt me but it did not stop he plant from becoming a universal favorite in its class.

This trait of overestimating the value of a personal product may lead to serious error. Long ago I hit on the plan of judging finally as to the value of



a new variety by the price it will bring and the number one can sell in competition with other sorts.

Recently credit in a most unexpected form came to me for my efforts in breeding Amaryllids and in promoting their popularity. Early last spring the

Secretary of the American Amaryllis Society wrote me that the society had awarded to me the Herbert Medal.

The medal, to the present date has been awarded but six times and but three Americans have received it. It is a beautiful bronze medal designed by Tiffany. Bronze, the enduring metal that tempts no thief, is the most fitting carrier of a sentiment.

My grateful acknowledgement is due to the Society. I must admit too that to deserve it will involve my best efforts in the future in behalf of Amaryllis, as well as those made in the past.

To pretend that I am not exceedingly proud, may be even a little vain, about this medal would be inconvincing. But I am not entitled to put on any high hat. There are too many others whose work in the same field is of highest value.

Yours sincerely,

CECIL HOUDYSHEL
La Verne, California

INSTRUCTIONS FOR ORDERING, ETC.

Sales Tax. California customers must add 3% to cover state tax. Compulsory, no choice.

If you are a new customer this catalog acknowledges your order. We ship bulbs promptly. Nearly all bulbs are ready to send out Sept. 1, with the exceptions as stated under catalog descriptions.

Order early. Certain bulbs bloom soon after planting in the fall. Others do not keep long out of the ground. To be safe, and to get the best bulbs order early. Best to plant early too. Of course, better late than never.

Remit with order, by check or M.O. Currency is acceptable if it gets here. Only rarely is it stolen from envelope. We prefer no stamps but if not convenient to remit another way we accept stamps only when \$1.06 worth are sent for \$1.00. We accept C. O. D. orders reluctantly as it adds 25c or more to your expense.

Postage prepaid. When you compare prices of our bulbs remember that we pay all the postage on orders of \$1.00 or more. Many dealers ship them charges collect. **On orders under \$1.00** send 10c extra, and don't forget it please.

Insurance if wanted for 5c extra.

Wholesale. We sell wholesale to dealers only. If in California send your Retail Sales permit no. Establish the fact you are a dealer. Dealers, please send a list of wants and we will quote. We have no wholesale catalog or list, though we grow large stocks of Pink Callas, Clivias and most items listed.

We issue a Spring Catalog about Jan. 15., Fall Catalog, about Aug. 15, and an Iris Price List about May 1. The last is sent only to those who request it yearly. The Spring and Fall Catalogs go to all customers.

Every enthusiastic gardner is looking for information. Visit your public library and ask for books on bulbs, etc. Look up varieties in Hortus or Bailey's Cyclopedie of Horticulture for culture methods, etc. I will advise that you subscribe for any or all of the following magazines.

Flower Grower, Dept. H., Albany, N. Y.

Sunset, Dept. H., San Francisco, Calif.

Madison Cooper's Gardening, Dept. H., Calcium, N. Y.

Southland Homes and Gardens, A section of Los Angeles Sunday Times.

YOUR FLOWER FRIENDS

Will appreciate learning about this catalog, and we will appreciate their orders. We need each other. We send catalogs only to those who request them. Tell them to drop a card to us.

Names are dropped if you do not buy bulbs for three years. If you do not intend to buy it is a much appreciated favor if you will return this catalog to your P. O. and ask it to be returned at our expense. We probably waste a few hundred dollars every year that we need, in sending them to persons who are not interested.

Print your name and address or write very carefully. We get many we cannot read.

In case of error or misunderstanding about your order notify us at once.

Prices. When the price of one bulb only is given the price of a dozen is ten times that and the price of 100 is 70 times the price of one. Half dozen is sold at dozen rate but not less than 100 at the 100 rate. The 1000 rate is 9 times the 100 rate. No less than 1000 at these rates.

EXCHANGING

We need Sternbergias and all rare bulbs. If you have a surplus or any rarity write us. For many bulbs we allow the wholesale price only but full value for rarities.

ALIBIS

We men often blame our wives for our own faults. We have to maintain our own dignity.

Seeking alibis seems to be a human weakness. I have been the confidant of both of a quarreling couple. I always advise this. Look for your own faults or mistakes instead of the other persons. Correcting them is likely to mend and sometimes to end troubles.

The other day I received a letter saying: "Not one of my 40 Tulips grew. They must have been old greenhouse forced bulbs. I am in the flower business and I have never failed before."

We have had hundreds of enthusiastic reports, verbally and by letter, telling of complete success and highest satisfaction with the very same Tulips.

Our dissatisfied customer asked us to explain why she failed—a thousand miles away. As well send a telegram to a doctor a thousand miles away to ask what killed the man with no particulars mentioned.

She was less reasonable than the young Doctor who kept complete notes about his treatment of patients and the results. Once a patient, an Irishman had a fever. He craved watermelon but the young Dr. would not allow him to have any. One evening the Dr. told his folks that Paddy could not live until morning.

So they thought as long as Paddy was going to die any way and was constantly begging for watermelon he might as well die happy. So they gave him all he could eat.

The next morning when the Dr. called expecting to find his patient dead, he found him chopping wood in the back yard.

He entered in his note book: "When an Irishman is critically ill, as a last resort give him all the watermelon he can eat."

A while later another patient, a Dutchman, became critically ill with a popular summer malady. After all his remedies had failed, as a last resort he ordered one evening, "Give him all the watermelon he can eat."

The next morning, he came in the back way expecting to find him there chopping wood. Instead he was met at the door with the information that the patient had died soon after eating a large melon.

So he entered in his note book: "That which will cure an Irishman will kill a Dutchman."

This may be an old story for you, but it illustrates faulty reasoning. A lot of people blame good bulbs or good seeds for a garden failure. Instead of that, try to find what was wrong. A gopher may have eaten the bulbs. Finding an alibi for an error in your culture does not help you. It only keeps your high hat in place.

We have been growing bulbs, plants of all kinds, all our life. We have studied the principles of biology, the laws which govern living things, and have some ability in experimentation. But we have failed often, and still fail sometimes.

We seldom publish a testimonial, but here is one from a very noted source.

The Arizona Temple
Church of Jesus Christ of Latter-Day Saints
Mesa, Arizona. April 4, 1937

Mr. Cecil Houdyshel
La Verne, Calif.
Dear Sir:

It is quite human for us to like to hear about the success of others with our product. This is especially true with Gardners, Seedsmen and Nurserymen. We all like appreciation and encouragement in our effort to produce the best in quality and value.

I had such wonderful success with the Ranunculus bulbs purchased from you that I want to tell you about it.

I planted 1,000 bulbs around the pool directly in front of the Temple. When they bloomed they made the most wonderful display of color I have ever seen, and such flowers! All the colors of the rainbow, reds, pinks, yellows, orange, white and variegated. Some looked like roses, others like camelias, poppies or big yellow daffodils. There were other shapes too and some were as round as a ball and at least 4 in. across.

Hundreds of people visit the Temple Gardens and they raved over these flowers.

I think I made a record with this planting. Out of the 1,000 bulbs planted, 999 grew. Some record don't you think?

Wishing you well in your efforts, I am

Very truly yours,
L. V. Guthrie
Gardener for Arizona Temple

We have received hundreds of letters telling of success in growing our Ranunculus. At the same time probably not over three to six reported failure, and one customer condemned the bulbs and buys no more. This last one too had grown our Ranunculus successfully many times before. She had the same bulbs that Mr. Guthrie had.

The causes of failure are sometimes evasive. It can happen to a careful gardener. It is easy to grow bulbs but not so easy that one can afford to overlook or neglect essential details.

Now some catalogs might not tell you that failure may happen. It may not be good sales psychology but it is a fact you should remember and try to avoid. If the driver of a wrecked automobile had in mind the things that can happen he might have avoided the accident.

When results are not up to your expectations try to determine what was wrong in your method. Only in very rare cases are the seeds or bulbs at fault. In such a case an honest dealer will find out about it about as soon as you do. Other people will report it and he will have planted a test lot. He will gladly replace the bulbs.

But a naturally disagreeable person will only think of writing a disagreeable letter. He should remember that the dealer has hundreds of other reports. If a vast majority is against him he only shows himself up.

A good gardener must be a good "Trouble Shooter" and an alibi is usually only self delusion. It only helps the self esteem, the "I never make mistakes" attitude, egoism. An alibi keeps the High Hat in place, but does not help the soft head under it.

IRIDACEAE

This is the Iris family and includes Gladiolus, Ixias, Bearded Iris, Bulbous Iris, Watsonias, Freesias, etc., ending with Iris reticulata.

GLADIOLUS

They are probably the most important members of the Iris Family. As a commercial cut flower, no other flower is used in such huge quantities. Nothing is so colorful, so well adapted to bouquets, to sprays or any sort of floral decoration. They are equally lovely in the garden.

So universally popular have glads become that growing them is a hobby with many and many societies promote their popularity.

The advent of the thrips proved a stumbling block nearly ten years ago. We said then that thrips would be conquered and that nothing could stop Glads.

That proved true. Today, August 11, we have a field of almost perfect flowers in spite of recent very hot weather. If you don't believe it come and see.

It is easy to do as well. Plant your bulbs in the fall in the south so that they bloom early before thrips appear. If possible water with an overhead sprinkler for about 30 minutes every evening. Like all hoboes, thrips don't like shower baths. They bother very little where rainfall is frequent and abundant when blooming.

Sprinkling may be accomplished by a Skinner overhead pipe or a rotary sprinkler at end of hose. Use finer spray. Or install sprinklers like those used for lawn but on pipes elevated above tops of Glads. Skinner system is best.

In the north plant Glads as early in spring as ground may be worked.

When you plant, don't plant any thrips. Many live over winter on the bulbs. Treat them this way. Dissolve 1 oz. powdered corrosive sublimate in 1 gallon of boiling water. When dissolved add it to 7 gal. of cold water. Use no metal container as corrosive sublimate attacks all metals and ruins the metal and the solution. Also keep animals and children away as it is deadly poison.

A barrel, keg or crock is ideal for use. Soak the bulbs in this for 6 or 7 hours. If you peel and clean the bulbs first, 4 hrs. are enough and the job is more thorough but the peeled bulbs must be planted soon.

Naphthaline flakes sprinkled lightly over bulbs in storage, then covered, with paper will kill most or all thrips. This injures the bulb if too much is used or left on too long. Best to uncover after three weeks.

The corrosive sublimate treatment also eliminates bacteria that causes scab or rot. But it does not eliminate possibility of future infection of either.

Our bulbs have been treated, no more is needed, but keep them away from other diseased bulbs or storage in infected place. Also clean up trash around garden where thrips may find protection over winter. If possible plant on new ground as far as possible from former plantings.

But if thrips appear remember they are regular hoboes. They don't like wet or cool weather nor to take a bath. Glads that bloom before May 1 here are almost sure to escape. The fall planted bulbs will escape them but sprinkle as added precaution. Then plant some in March, April and May for a succession of flowers. These spring planted Glads must be overhead irrigated, 30 min. after sundown to avoid injuring flowers, and daily. Thirty minutes means continuous spraying in one place.

Any good soil will grow Glads, rich sandy loam preferred. If there is alkali in your soil that is bad. Nearly all members of Iris Family prefer mildly acid soil. Glads bulbs raised in alkaline soil will be scabby and poor. To overcome alkali mix ground peat with soil in the trench. Leave a depression on surface above bulbs and mulch with an inch or more of ground peat. Leaf mold, especially from beneath oak trees is acid and very good in place of peat.

Do not use fresh animal manures. They contain ammonia, an alkali. Completely rotted and incorporated long in advance they improve the soil for Glads. Only one chemical fertilizer may be used. Nearly all leave an alkaline residue but Superphosphate is acid and is good. Apply a tablespoonful to each foot of row when glads are about 8" high.

Plant large bulbs 4" deep, small 2", two rows staggered in one furrow, twice the diameter of bulbs apart.

The following list includes the worlds best and most popular.

Prices. In this list as thruout this catalog, L. means large; M. means medium; S. means small. The large bulbs give longer stems and more of them. Medium size in most varieties give good tall spikes but fewer. Small bulbs of a few varieties (like Los Angeles) will give a fine tall spike but usually only a shorter spike and but one. In Glads L. means #1 and #2. M. is #3 and #4.

S. is #5 and #6. #6 is $\frac{1}{4}$ to $\frac{1}{2}$ " diam. and #1 is $1\frac{1}{2}$ " diam. or over, each size increasing $\frac{1}{4}$ ".

One dozen bulbs cost 10 times price of one bulb which is given and 100 bulbs costs 70 times the price of one unless otherwise stated. **Californians must add Sales Tax.**

Bulbs will be delivered about November 15 and on. That is the earliest date to plant for early spring flowers.

Aflame. Giant begonia rose. Early, fine. L. 6c.

Aida. Deep violet blue. 6c.

Albatross. Best pure white. Large. 6c.

Allemania. Very large, rosolane purple. L. 10c.

Annie Laurie. Ruffled rose pink. L. 5c.

Ave Marie. Near-blue. Fine, large early flowers. L. 6c.

Bagdad. Fine, smoky old rose. A beauty, L. 6c. M. 30c doz. S. 20c doz.

Betty Co-Ed. Soft creamy pink. A small prim, fine for cutting. L. 5c ea.

Per 100, \$2.50. M. 25c doz. S. 15c doz.

Betty Nuthall. Orange pink, yellow throat. Early. L. 5c ea. Per 100, \$2.25. M. 25c doz. S. 15c doz.

Bill Sowden. Large deep red. L. 6c.

Blue Danube. Amethyst blue. L. 6c.

Com. Koehl. Immense scarlet. L. 7c.

Dr. F. E. Bennett. Flame red. Almost the most satisfactory red. L. 5c. \$2.75 per 100. M. 30c doz. S. 20c doz.

Dr. Moody. Large lavender. Similar to Minuet but no light throat. L. 6c.

Golden Dream. Best tall deep yellow. L. 6c.

Kirchoff's New Violet. Best violet. L. 7c.

La Paloma. Early, vivid orange. L. 5c. M. 35c doz.

Lavender Delight. Name truly describes it. L. 7c.

Libelle. Heliotrope blue. The most lovely blue. L. 7c.

Los Angeles. Orange toned pink. Most profuse bloomer and best winter grower. More grown for cutting than any other except Picardy. One large bulb has produced 12 spikes for cutting. If planted close or if too dry the flowers are poor. Give double space in planting, more water and be surprised. L. 5c. 100 for \$2.25. M. 25c doz. 100 for \$1.25. S. 15c. doz. 100 for 85c. S. size will bloom.

Mammouth White. The largest pure white. 7c.

Marmora. Immense smoky lavender. L. 7c.

Minuet. Still the best lavender. L. 6c.

Mother Machree. Smoky lavender with orange and grey. L. 6c.

Mrs. Konynenburg. Best deep blue. L. 5c.

Mrs. Leon Douglas. Very tall, large begonia rose. L. 5c.

Pelegrina. Deep violet blue. Very early, strong grower. L. 5c. 100 for \$2.50. M. 30c doz. 100 for \$1.75. S. 20c doz. 100 for \$1.25.

Pfitzer's Triumph. Immense salmon red. L. 6c.

Picardy. Large shrimp pink. Voted the world's most popular glad. It is the best. L. 5c. 100 for \$2.50. M. 30c doz. 100 for \$1.50. S. 15c doz. 100 for 85c. All sizes bloom.

Purple Glory. Large ruffled dark red. L. 5c.

Radiant Orange. New true orange. L. 7c.

Red Lory. Lovely rose red. L. 6c.

Rose Marie Pfitzer. Deeply ruffled, creamy white, suffused pink. Very beautiful. L. 15c.

Ruffled Gold. Name describes it. L. 10c.

Souvenir. Pure deep yellow. Prim. The small flowers on wiry stems make it the most artistic yellow in floral decoration. L. 5c.

Troubadour. New deep violet purple. L. 7c.

Virginia. Still the sweetest rose red. L. 5c.

Wasaga. Glowing apricot. L. 6c.

Yellow Perfection. Pure yellow. L. 7c.

Mixed. No bulbs in this mixture worth less than 50c doz. Some worth more. Best buy if you don't want names. L. 50c doz. 100 for \$2.50.
Californian's add 3% Sales Tax.

BABY GLADIOLUS

These are real glads but dwarf in size. They must be planted in the fall as they grow in cool weather and bloom very early. They are not suited to summer culture. Blooming early they escape thrips. Culture same as for glads except being smaller they are planted more shallow and close. We have them in salmon, rose, red and white in named sorts at 2 for 15c or 75c dozen. Mixed sorts for three for 20c or 50c doz.

WATSONIAS

Second cousin, once removed, to Gladiolus in the Iris Family. In the south it grows in the winter and must be planted in early fall as bulbs sprout if not planted. Flowers are much smaller than Glads, less varied in color. Three to five and one-half feet tall. Stems are wiry, flowers lovely and are fine for cutting. Plant about like Glads and give plenty water. They like an acid soil. Use peat or leaf mold but not fresh manure. They bloom over a very long period and begin very early. A "must have" for southern gardens. Probably hardy in the "Philadelphia Climate." Farther north they will probably not sprout if stored at about 40° or planted 6" deep and well mulched with leaves and brush. Try a few and report results to me. Some report success. They need to be dug only when too crowded.

White, general favorite. 7c ea. 60c doz.

Burbank's Lavender. It is really Hay's lilac. Large fine flowers. 10c ea. 75c doz.

Clementia. Spinel pink. 10c ea. 75c doz.

Liseran Purple, some might call this "orchid" 10c ea. 75c doz.

Rosolane Purple, another "orchid." 10c ea. 75c doz.

Scarlet, 10c ea. 75c doz.

Mixed colors. White predominate. Being made up of unlabelled lots the mixture is not claimed to be balanced. You may get all white or several colors. 7c ea. 60c doz.

Watsonia Marginata. This is new and quite different from the well known types. The flowers are lavender tones, small but closely placed on very thin, wiry stems often nearly 6 ft. tall. They look much like a giant Ixia Bloem Erf. Exceedingly desirable and fine for cutting. 15c ea. \$1.25 doz.

Watsonia Dazzler. Different from the above types in that it is evergreen and blooms profusely in spring and summer with occasional bloom thru the year. Brilliant scarlet. Delivery about December to January. 35c ea.

IXIAS

Ixias grow about 30" tall. They have long wiry stems and are nice for cutting. Altho the flowers close at night and on dark days, the long closed buds are nicely colored and are attractive either closed or open.

Culture. Ixias are tender bulbs and in colder climates can be planted in early spring. If planted in protected situations and well mulched in the fall the bulbs will survive in most climates. If planted in the spring, bulbs must be obtained in the fall as they cannot be held that long here. In that case cover bulbs with dry sand, dust or peat and store at low temperature above freezing. Plant as soon in spring as possible.

In the north they may also be grown in a cold frame or in pots in the house or greenhouse. But give full sun and stake the plants when tall.

In mild climates in the south, plant early and not later than November, and in full sun.

Plant about like Feesias but allowing more room, about 12 to the foot in a double row is right. Use no animal fertilizer. Members of the Iris family usually prefer acid soil, therefore peat or leaf mold is good mixed with soil and used as mulch. If you have to fertilize try Superphosphate, sparingly until right quantity is found.

Our list of Ixias is a good one. They are inexpensive, attractive.

Bloem Erf Hybrids. The finest Ixias we've seen. Colors white to pink with lavender and bluish tones. Late. Height 4 to 5 ft. 10c ea. \$1.00 per doz. \$6.50 per 100.

Incarnata. A new Ixia. Light blue flowers that do not close at night. 2 ft. high. Freesia-like fragrance. Early. 25c ea. \$2.50 per doz.

Red. This may be Lapeyrouisia or something else very much like an Ixia as it is not so tall and blooms later. Until identity is determined we list here. It is too fine to ignore and a rose by any other name would be just as sweet. The flowers are bright clear red. 5c each. 35c doz. \$2.50 per 100.

Ixia Mixture. Contains only a few colors and none of the above sorts but nice ones anyway. 5c ea. 35c doz. \$2.50 per 100.

BABIANAS

Babianas have plaited leaves and are closely related to Freesias, Tritonias etc. They require the same culture and are useful in the garden or in pots, window boxes, etc.

Assorted Hybrids. Fine mixture in various shades of red, pink and blue. Stems are 6 to 12 in. These are much better than the usual sorts. 10c ea. \$1.00 per doz. \$8.00 per 100.

FREESIAS

Freesias are the most deliciously fragrant of flowers. It is a strong fragrance but not heavy or offensive to anyone as is that of Tuberoses or Chinese Lilies.

Formerly the Freesia was a white flower with a yellow throat. Now plant breeders have produced pure white flowers as well as rich yellow, pink, rose, red and lavender. The stem has lengthened, the flowers increased in number and size. They are very popular for cut flowers and lend themselves to all decorative uses and for growing in the house or garden.

They are not hardy in cold climates but in the mild climate of the south where temperatures seldom fall below 28° to 30° they may be grown in the garden. They are ideal for pots and window boxes in the north. You can buy more fragrance for a small sum in freesia bulbs than in a bottle of perfume, and the beauty is thrown in.

Culture. Plant in the garden by about October 1. They can be planted as late as December 1 but early planting is much better. We have planted in early January but at that date 75% of the bulbs have dried up.

Plant in full sun, three rows in a 4" furrow, 2" apart each way and 2" deep. That makes 18 bulbs to a foot. They like each other and sit close. Sandy loam soil is preferred but heavier soil is good. Plenty of decayed humus should be incorporated in soil. Mulch of peat or screened leaf mold is good. Do not use manure having ammonia odor on any Iridaceae (Glads, Iris, Watsonias, Ixias, Tritonias, Freesias, etc.) They are not usually fond of Alkali, prefer acid or near neutral soils.

Freesias should have a sunny window in a cool room indoors. Living rooms are too hot. Temperatures between 40° and 60° are best. They will endure 30° but should seldom go much over 70° for best results.

Plant 6 bulbs in a 5" pot, or 2" apart in pots or boxes. Unlike most bulbs they can be placed in the sun at once after planting. They bloom by the time other bulbs are getting started.

Try them in your window garden this winter and you will always have them hereafter.

Apothoese. One of best. Large flowers opening deep mauve lilac turning to bright carmine pink. 40c doz. \$2.25 per 100. Extra large bulbs, 50c doz.

Baker's Super White. Out doors it is the best white. Purest in color, largest flowers, longest stems. We have only small bulbs, good for the garden but not recommended for house culture. 35c doz. \$2.00 per 100.

Golden Daffodil. The very best Freesia. Pure golden yellow, deep in color. Favorite of all varieties and best forcer. 35c doz. \$2.25 per 100.

Pink Supreme. The best pink we have seen, and very fine. 45c doz. \$2.50 per 100. Extra large bulbs, 55c doz.

Purity Superflora. The earliest good white, an improved Purity. Fine indoors. Scarce this year. 45c doz.

Rose Supreme. A fine deep rose pink. 45c doz. \$2.50 per 100. Extra large, 55c doz.

Sunset. Vivid sunset colors of red, rose, slate, blue etc. Very attractive. The bulbs offered are just under $\frac{1}{2}$ " and recommended only for outdoor gardens where they will bloom satisfactorily though they would probably flower inside. 35c doz. \$2.25 per 100.

Freesia Special. Forty assorted Freesias for \$1.00. All varieties are included except Purity. Super White may be omitted if you prefer all colored.

TRITONIA

Tritonias are very close to Freesias. They are taller and flowers are larger. The culture is the same except that being larger a little more space is given. You can plant 2 $\frac{1}{2}$ " apart in triple row and 2 $\frac{1}{2}$ " deep. They may be grown in the house but also like freesias they must have sun.

Prince of Orange. Looks like a huge orange freesia. Just to get you to try this fine bulb we price it lower than the wholesale price in Holland where bulbs are cheap. 5c ea. 45c doz. \$3.00 per 100.

MONTBRETIAS

They are closely related to Tritonias as well as Gladiolus, Watsonias and Ixias. They do best in a good loamy soil with leaf mold or peat added. A top mulch helps very much as they should never dry out. Bulbs should never dry when dug but store in dry peat and for as short a time as possible.

Plant in California from December to early spring but as early as possible. In the north plant in early spring. Plant about 3" deep and 3 or 4" apart, in full sunlight. Water frequently.

His Majesty. The best of the new hybrids. Very large flowers, deep, velvety scarlet. 4 $\frac{1}{2}$ ft. tall. Delivery in late fall. 25c ea. \$2.50 per doz.

MOREA

Moreas are African representatives of Iris with round, wide open, charming flowers that last only a day or two but plenty more take their place. Culture like Iris. Full sun.

Morea iridioides. White with yellow and blue markings. Blooms every two weeks from early spring to late fall. Very fine for California gardens. Not hardy. Has a rhizome that may be transplanted in the fall or early spring. 25c ea.

M. polystachya. A new and lovely flower. Tall wiry stems with many flowers like gaudy butterflies. Outer petals mauve, marked violet, bright yellow spot at base. Inner petals lavender. Plant the bulbs 4" deep in fall or spring. It is said to do well in pots. 15c each. \$1.50 doz.

STREPTANTHERA

Streptanthera cuprea. A bulb so new that it is not even mentioned in garden literature. Foliage like tritonia. Flowers brilliant orange red. Hardier than Freesia, more vivid than Sparaxis. Culture like Freesias. 15c ea. \$1.50 doz.

IRIS

All the following bulbs in this family belong to the genus Iris. They are the true Iris, the type plant for Iridaceae.

TALL BEARDED IRIS

These may be planted in the fall. Some prefer that time. Send for our Iris Price List if you intend buying. Only a few varieties are specially priced below.

Culture. Plant rhizomes 1" deep in any good soil. They love acid or

neutral soils. Do not use any barnyard fertilizer, ashes or lime on Iris. Plant in full sun.

Cecil Houdyshel. Tall lavender plicata. 25c ea. \$2.00 doz.

Bobby Houdyshel. Dwarf phlox pink plicata. 10c ea. \$1.00 per doz.

Eleanor Brooks. Like Bobby Houdyshel but taller, and has more yellow in throat and a deeper tone of phlox pink. 25c ea.

Golden Cataract. A pure deep golden yellow. Here it blooms the year around except when very hot in midsummer or when winter is very cold. \$1.50 ea.

Iris Collections. 35 unnamed seedling Iris, \$1.00. Ten excellent, modern Iris for \$1.00 including Bobby H., Cecil H., Eleanor Brooks and 7 more of our selection. 20 Var. good Iris, \$1.00. Last two are all labeled.

BEARDLESS IRIS

Fimbriata. Lovely and delicate lavender crested Iris. Requires shade. Blooms February. 25c.

Spuria Aurea. Tall, large, pure yellow. Requires plenty water, sun or part shade. Hardy. 50c.

Spuria aurea hybrids. We paid \$5.00 and \$7.50 each for these but now have enough to offer at a low price. Large flowers with ruffled petals on tall stems. Two varieties, \$1.00 each.

Spuria ochroleuca. White with yellow spot in throat. 35c ea.

Stylosa. Small, lavender winter blooming. 25c ea. \$1.50 doz.

Tectorum. The roof iris. Crested lavender flowers. Hardy, 25c ea.

Louisiana Species. Part shade or full sun. Plenty moisture. **Violipurpurea.** Red violet. 50c. **Moricolor.** Later, darker red; finer. \$1.00.

Beardless Iris, except I. tecotrum will not be delivered until about November, when they transplant better.

BULBOUS IRIS

These are Dutch Iris, rather better than the Spanish Iris. The flowers are excellent for cutting, not being fragile like Bearded Iris.

Culture. Plant in the fall. Early planting is advisable though we have planted as late as December to February but after January 1 many bulbs have perished. Plant about 3" deep and 3 or 4" apart. We plant double rows in a furrow like glads. Plant in full sun or partial shade. They should be well watered. They are hardy in eastern states but a mulch is advisable.

These iris are very hardy and easy to grow, but of course there is something to look out for. There is always something, thrips on the Glads, fly grubs in Narcissus, Mosaic in Tulips and Bulbous Iris, ants in the sugar, flies in the butter. But overcoming nature is that which developed human intelligence and made man ruler of creation.

We've licked the thrips, wheat rust, potato scab, tomato wilt and all. We can hold them all in check.

Mosaic disease in Iris causes the foliage to appear mottled and streaked with lighter yellowish green. The flowers are ruined or very poor. The disease spreads from plant to plant by contact with hands or tools or thru insects. The remedy is simple and fairly effective. Dig the plant, bulb and roots when leaves mottle and streak. Then do not touch healthy plants. Plant the following year in new soil.

Apparently healthy bulbs may contain the disease virus. One must be vigilant. Healthy bulbs and plants with correct soil and other conditions are more likely to escape any plant disease.

We have found alkaline soils, alkaline producing fertilizers like lime, ashes, manure and most chemicals are bad for most of the Iris Family. We suggest the use of leaf mold (especially Oak) and ground peat in the soil to produce acid condition. And try a little superphosphate.

We will replace any of our own bulbs showing mosaic. We seldom lose any. Count the number dug up, if any, the first year and tell us.

De Wilde. The best deep yellow. 15c ea. 75c doz.

Hart Nibbrig. Clear blue. 10c ea. 50c doz.

Imperator. Tall, large blue. 10c ea. 50c doz.

White Excelsior. White, but very short stem. 10c ea. 75c doz.

Wedgewood. Wedgewood blue. The finest Iris for cutting. Makes large bulbs. Large 20c ea. \$1.50 doz. Medium 10c ea. \$1.00 doz.

Yellow Queen. Pure deep yellow. 10c ea. 65c doz.

Mixed. We don't know what colors are included, it may be one or all as labels were lost. Price 40 for \$1.00.

IRIS RETICULATA

This lovely little iris is a new acquisition and scarce yet, hence costs more. But they are good growers and increase well. They resemble a small Dutch Iris. Bloom outside in February and in pots about the same time or by Christmas if planted early. In pots keep in a rather cool room. Only about 8" tall with dainty lavender flowers and violet perfume. Plant 4 in a 5" pot. 30c ea. 4 for \$1.00.

AMARYLLIDACEAE. AMARYLLIS FAMILY

The Amaryllis Family is probably the most important of all among ornamental plants though many might consider them second to the Iris Family. From a commercial viewpoint that may be true as so many are used for cutting but for rich beauty in a variety of forms we hold our first statement true.

There are many who will agree with us. There is something so intriguing about the Amaryllis Family,—let's call them all just Amaryllis, that many have adopted them as their hobby, and are making collections.

HOBBIES

To have a hobby is rather a human necessity. It is of psychological importance. If we were monkeys or even primitive humans we would not need one. But with the mental development of the present day man, the stress and strain of life,—business, professional, home management and even social affairs require a counterbalance. Something that relaxes. But it must also interest. Some find it in stamp collecting, or the collection of art or other objects.

Gardening is the best hobby of all because it also offers exercise. The best of the best is collecting and growing Amaryllis. We began in 1898 with our first Amaryllis Johnsonii. Our interest deepened by contact with a great biologist, our teacher, Dr. S. Williston, of Kansas University, Yale and Stanford. Later with Luther Burbank. For many years we have been growing and breeding Amaryllis.

THE AMERICAN AMARYLLIS SOCIETY

The interest in Amaryllis has grown rapidly in recent years. A society has been formed that altho called the American Amaryllis Society is in reality international in scope. Its members come from every continent and all the leading nations.

This society sponsors several spring and fall flower shows that are held in Florida, California and New York. They publish a year book, "Herbertia." This book acquaints its members with the best advice in culture; descriptions and illustrations of species and varieties; results of experimentation in propagation; new species; every sort of information about Amaryllids.

If this book were published for profit and those who make it were paid, it would probably cost \$7.50 per vol. at least. We find its value inestimable. Every member receives it free.

Membership costs \$2.00 per year. The next volume of Herbertia is ready for publication and will be mailed this fall. We recommend that you send us \$2.00 with your bulb order and let us recommend you for membership. Get several of your friends to join with you and even form a local club. Different

club members can lead a topical discussion at your meetings. Get a full set of former volumes of *Herbertia* for reference.

We would like to see hundreds of Amaryllis Clubs in America. Incidentally we wrote a few "pieces" for the new "*Herbertia*."

THE FALL AMARYLLIS SHOW

The American Amaryllis Society sponsors a show on Sept. 22 at Pomona, California, in connection with the Los Angeles Co. Fair. Whether you are a member of the Society or not if you have some flowers of Amaryllis, Day Lilies, Alstromerias, Zephyranthes, Crinums, Lycorus, Nerines, Hippeastrums or any others belonging to this large group of plants be sure to enter them. You might win a ribbon or even a cash prize. But better still you aid a good cause.

Write to Ernest Middleton, Dept. H, L. A. Co. Fair, Pomona, California, for a Premium List. Bring your flowers whether you know them or not and we will identify them for you.

If you live within 500 miles you should see this, the world's greatest County Fair. See the many fine new buildings, famous horses, latest machinery, artistic exhibits.

All of the following list up to Liliaceae belong to the Amaryllidaceae. The culture varies hence is given under the genera. This is by no means our complete list. Many others that should be planted then will be offered in our Spring Catalog.

Alstromerias are very showy plants with a slender, weak stem slightly inclined to climb. Very useful cut flower.

Culture. They must have 50 to 75% shade. The soil should be a rich sandy loam with a great deal of humus. This may be had from very old rotted screened manure or leaf mold. Plant in the south in September or October only, with the crown 2" under soil surface.

They must have an abundance of water at all times when growing and a good under drainage. They are hardy as far north as Washington, D. C., and we have them reported hardy in a well protected situation, with winter mulch in New Jersey. In the north they can be planted in the spring. Carefully lifted in the fall and stored. They also may be grown in large pots. See under seeds also.

Alstromeria pelegrina. **Lily of the Incas.** Dark rose. Inner petals spotted with red purple. Large umbel on an 18" stem. Vigorous and showy. 30c ea.

A. pelegrina alba. A very beautiful white form, unspotted. 30c ea.

Amaryllis. **Lady Godiva Lily.** Begins to flower in August. Our July dug bulbs may be held back and usually will flower in late September. The flowers appear before the foliage, unclothed beauties, hence the name. The flowers are lily shaped, soft pink and exquisitely scented. Cut well. They are hardy as far north as Washington, D. C., and have been reported hardy in Missouri. In pots they usually bloom only the first year. But it is worth far more than their cost to see them once only. In any case they seldom bloom the second year. They usually skip at least one year after transplanting. Plant with top of bulb covered about 2". Easy,—not fussy. Endure 12° of frost without damage. Order before September 15.

Amaryllis belladonna major. Earliest. Pure pink. 25c ea. Very large, 35c ea.

A. belladonna minor. Blooms about the time **major** is gone. Rose pink with white throat. 35c ea.

A. belladonna minor. Deep rose variety. \$1.00 each.

CLIVIAS

Clivias like Orchids have been considered a rich man's flower. Not so much because of the expensive equipment needed, greenhouse and a specialist to grow them, as in the case of Orchids, nor because they are, like them, hard to grow, but because they are rare, increase slowly by division and require 5 to 7 years to reach blooming size from seed.

We are overcoming that somewhat by growing in open ground instead of

pots. By liberal use of the proper fertilizers and wide range for the roots, the plants increase as rapidly as Hippeastrums but require more time to mature.

We have also eliminated another large expense by shipping safely with bare roots packed in moss, postage prepaid. Usually the buyer pays express on a heavy pot of soil in a stout and heavy box.

By our method we often deliver plants with a bud showing (in February or March) and they go ahead and bloom for the customer.

The foliage of a Clivia resembles that of a Hippeastrum (Amaryllis) very much, being long and strap shaped. It differs in having a tough leathery texture and is a very much darker green.

The flowers are borne in large umbels up to twenty. Individual flowers are two to four inches in diameter, with several open at a time. Foliage and Flowers distinctly relate them to Hippeastrums, Crinums, etc.

Colors are orange toned ranging from very light orange yellow to dark rich orange red. A large Clivia in full bloom is a magnificent thing. A fair test of quality is the price a thing will sell for. One hundred stems of Clivia flowers were cut and sent to a flower market. They sold for \$100 wholesale, with a follow up order for 500. This was only a test so the buyer did not get the 500. Five hundred stems would produce much more than \$500 worth of seed when sold wholesale.

Culture. Contrary to popular belief, Clivias are easy to grow. Considered by some easier than Hippeastrums and more sure to flower. That could hardly be true though if the Hippeastrum is handled right as it is also easy to grow and sure to bloom.

In very mild climates Clivias can be grown in the ground outside in **full shade**, but not in part shade. This is not highly recommended for expensive hybrids, however. The best soil contains some heavy or clay soil made porous by adding sand and abundance of humus in form of thoroughly rotted and screened manure or leaf mold, with top mulch of the same.

The drainage must be perfect, such as that afforded by a slope or a thick layer of gravel under soil. The best time to plant is during warm weather. They transplant readily but do not begin immediate growth. After acquiring one it is best not to remove from the soil but transplant with ball of earth if necessary.

They easily endure a temperature of 28°. We saved ours in January '37 when temperature was 20° by covering.

The only insect enemy is the mealy-bug. They are easily controlled by oil sprays in a small 15c sprayer. Every feed or seed store can supply an outfit for about 50c. We use a Garden Hose Sprayer with cartridges of pyrethrum-rotenone. We can furnish these.

During warm weather Clivias must not dry out. Water liberally. During the winter resting period it is better to partly withhold water but not altogether. While blooming, water liberally. In the ground they can have a mulch of 6" of well rotted manure. Leaves, including oak leaves, make a good mulch. We sometimes use nitrogenous chemical fertilizers carefully. They are hearty feeders.

The three essentials necessary to complete success are full shade, perfect drainage and freedom from mealy bug. Each requirement is easy to fulfill.

There are several types. *C. miniata* and *C. nobilis* are species. *C. cyrtanthiflora* is believed by some to be a hybrid between these two. There are two types of hybrids named according to predominant characters, *C. miniata* hybrids and *C. nobilis* hybrids. The *miniata* hybrids are hardier and stand slight sun better, etc. The flowers are wider open and flat, as large in size. They are as attractive in color but run to lighter shades. They increase more rapidly. The foliage is more pointed and more narrow but not nearly as much as in the species *miniata*.

Nobilis hybrids are darker. The petals in many flowers incline to turn in or cup. They are higher priced and evidently some like them better, but very likely their greater rarity explains that. The greater rarity may result from the slowness of increase and the fact of a greater mortality.

Last Spring we explained that we were offering *C. miniata* hybrids for \$4.00 because of a heavy expense in building a Clivia house. Later we offered them

in an advertisement for \$3.50. We gave those who paid \$4.00 the largest plants so all were treated fairly.

It was our intention to sell at our regular price of \$5.00 this fall. This is a reasonable price for a good blooming size hybrid. But there was a recession during the summer that makes the situation the same as in the Spring. So we shall have to continue the cut in prices. No selection of color can be made.

C. miniata. The hardiest of all. Large blooming size plants \$1.00 ea. Small plants 75c.

C. miniata hybrids, large blooming size, \$3.50. Extra large \$4.00 each. Small plants \$2.00 ea.

C. nobilis hybrids. \$10.00 to \$15.00 each. We advise the miniata hybrids.

Note. Our Clivias are a good commercial strain. The flowers are guaranteed to please you. If not they may be returned for exchange.

Cyrtanthus are small bulbous plants quite easy to grow in partial shade in southern gardens. They are easy also in pots and window gardens. They are about as large as Zephyranthes and have lovely, long tubular flowers. They bloom freely always. Evergreen.

C. lutescens. Bright yellow flowers. 50c ea.

C. mackenii. Clear ivory white. 50c ea.

DAFFODILS OR NARCISSUS

Daffodil is an English word and is applied to all bulbs of the botanical genus *Narcissus*. This botanical name is from Greek mythology. *Narcissus* was the handsome youth who fell in love with his own image in a pool. Sculptured forms of *Narcissus* are found in Egyptian tombs dating to 100 B.C.

But it is their great beauty in a vast variety of form and color that makes them popular. We list a few of almost every type. Every flower garden should have all these types represented.

Culture. All Daffodils except the *Polyanthus Narcissus* are hardy both in the mild climate of the south as well as in the colder northern states. In the north especially it is best to plant the larger bulbs rather deep where the frost does not reach. Six inches is about right. Smaller bulbs like Jonquils may go more shallow. In California too, and all the south there is an advantage in deep planting.

Some Daffodil is fitted for about every situation and exposure in a garden. A little shade is good for probably every one and some must have about 90% shade in mid-day with full sun only in morning and evening.

Where special requirements are needed that is mentioned with the description.

The time of planting should not be delayed. Plant early for best results. In any case do not delay beyond November. December will do. Some may be held out of the ground as late as February but it injures them. We aim to be sold out before January 1. *Poeticus* should be planted very early. Most of them are ruined out of the ground by November 1.

Sandy loam is the best soil but any good rich garden soil will do. The addition of thoroughly decayed manure or leaf mold, screened and evenly mixed in advance of planting is a help. Use no fresh manure.

Many people cut off the tops of Daffodils after flowering. As a result they do not bloom for several years. Keep them growing as long as possible to increase in number and size and to make a blooming bud for the next season. Remove the leaves only when they begin to turn yellow.

All Daffodils bloom well in the house but certain ones are especially suited to pot culture. These are mentioned.

TRUMPET DAFFODILS

Emperor. Rich golden trumpet, petals lighter, good grower and free bloomer. 10c ea. 85c doz. 100 for \$5.00 not prepaid.

Glory of Sassenheim. Golden yellow trumpet, white petals. 10c ea. \$1.00 doz. 100 for \$6.00 not prepaid.

King Alfred. Large deep golden yellow. Best and most popular. 10c ea. \$1.00 doz. 100 for \$6.00 not prepaid.

Lovenest. The Pink Daffodil: Trumpet tinted apricot pink. Petals white. \$1.50 each.

Mrs. E. H. Krelage. The White King Alfred. The pale yellow trumpet turns white. Exquisite. 20c ea. \$2.00 doz.

Mrs. R. O. Backhouse. White petals. Trumpet tinted coral rose. An exquisite daffodil with a pink trumpet of a very definite tone. Price \$2.50 each.

Olympia. Golden yellow with frilled trumpet. 10c ea. \$1.00 doz. 100 for \$7.50 not prepaid.

Robert Sydenham. Superb heavily frilled trumpet of golden yellow with symmetrical soft yellow perianth. A very large flower of rugged, well proportioned beauty. 25c ea. \$2.50 doz. 100 for \$15.00 not prepaid.

Tresserve. Exquisite, large, golden yellow, frilled trumpet. 10c ea. \$1.00 doz.

Van Waveren's Giant. Enormous but graceful flower. Frilled deep yellow trumpet. Perianth pale yellow. 25c ea. \$2.50 per doz. 100 for \$15.00 by express, not prepaid.

W. P. Milner. Dwarf. Pale sulphur. Fine for potting or rock gardens. White when forced. Try one to three in a pot. 25c ea. Three for 70c. \$2.25 per doz.

INCOMPARABILIS DAFFODILS

Croesus. Petals pure gold with a deep red crown. The best at a low price. 20c ea. \$2.00 doz.

Helios. Extra early. Large yellow flower with orange yellow crown. 25c ea. \$2.25 per doz.

Homespun. Soft yellow petals, richly colored crown. 10c ea. 75c doz.

Sir Watkin. Petals and trumpet pure yellow. 10c ea. 75c doz. 100 for \$5.00 by express, not prepaid.

BARRI DAFFODILS

Barri Conspicuous. Perianth bright yellow. Cup edged with brilliant orange scarlet. Special 60c doz.

Bonfire. Ivory white petals, glowing orange scarlet crown. A dazzling contrast. 15c each. \$1.50 doz.

Firebrand. Creamy petals with red cup. 10c ea. \$1.00 doz.

Red Guard. Petals tinted copper apricot. Crown, blazing orange red. \$1.50 each.

Diana Kasner. Pure white petals and fluted yellow cup with blood red frill. Fine forcer in pots. 25c.

LEEDSI DAFFODILS

Crystal Queen. Pure white petals, crown primrose fading white. Leader in this class. 15c ea. \$1.50 doz.

TRIANDRUS HYBRIDS

Agnes Harvey. A dainty pure white daffodil. Trumpet sometimes flushed apricot pink. 30c ea. \$2.75 doz.

Pearly Queen. Creamy petals with lemon yellow trumpet overlaid by a pearly sheen. 50c ea.

Queen of Spain. Beautiful, distinct and graceful. Canary yellow. Fine for pots or rock gardens like all Triandrus. 35c ea.

Thalia. 3 to 5 pure white daffodils on one stem. Exquisite. Especially fine in a pot. 35c ea.

CYCLAMINEUS HYBRIDS

February Gold. Pure golden yellow dwarf daffodil. The trumpet is fringed orange. Very early. Exquisite for pots or shady rock gardens. 35c ea.

Culture note. The Triandrus and Cyclamineus types need plenty of moisture and at least part shade.

POETICUS DAFFODILS

The Poets Narcissus are distinct in form, having white petals and a red cup. They bloom late. Their beauty intrigued the poets from Vergil to Tennyson.

Horace. Conspicuous red eyes, free flowering, strong stemmed. 10c ea. \$1.00 doz.

Juliet. Pure white, fine cup margined scarlet. 15c ea. \$1.50 doz.

Recurvus. The "Pheasant's Eye" Narcissus. This is the Poeticus celebrated by Vergil and best loved of all Narcissi. Very hardy. 10c each. 65c doz.

POLYANTHUS NARCISSUS

The "cluster flowered." Hardy only in mild climates but unequalled for pots in the house. Highly perfumed. May be grown in bowls of fiber or held up by pebbles.

Chinese Lily. White with yellow eye. Blooms December to January. 10c ea. 85c doz.

Grand Monarque. White with primrose eye. 10c ea. 85c doz.

Paper White. Pure white, earliest. 10c ea. 65c doz.

Soleil d'Or. Petals pure golden yellow, cup brilliant orange. Makes a brilliant effect in the garden here in January. Equally fine in the house and goes right on blooming even at 20° F. 10c ea. Good blooming size, 75c doz. Large, \$1.00 doz.

POETAZ HYBRIDS

Hybrids between the Polyanthus and Poet's Narcissus. Hardy and fine.

Aspasia. Pure white, yellow cup. Best in this color. 10c ea. 90c doz.

Abundance. Creamy yellow, with deep orange cup. 10c ea. \$1.00 doz.

Orange Cup. Pale yellow, with deep orange cup. 10c ea. \$1.00 doz.

JONQUILS

They look like small Trumpet Daffodils, with about three flowers on a stem. Exquisite. Very hardy and rapid multipliers. Fine for potting. A most alluring and distinctive fragrance.

Campernelle regulosus. Improved pure yellow. 10c ea. 85c doz.

Campernelle giganteus. Much larger. The finest yellow Jonquil. 15c ea. \$1.25 doz.

Campernelle Orange Queen. Very striking. Intense golden orange with fluted cup. True Jonquil fragrance. Gayest of all Daffodils. 25c ea. Five for \$1.00.

Golden Scepter. A new Jonquil-Daffodil hybrid. Flowers 3 inches across. Late. Deep Jonquil yellow. 20c ea.

NARCISSUS BARGAIN

A mixture containing mostly Grand Monarque and Paper White with some "labels lost" that may have some of the more expensive. Probably no Chinese Lilies. 30 for \$1.00.

Eucharis grandiflora. A rare plant with a rare beauty and fragrance of flower. Broad attractive leaves, evergreen and waxy white flowers with a cup or corona after the fashion of a Daffodil or Hymenocallis. They are said to flower 3 or 4 times a year if rested but here it is difficult to get the flowers.

They must have high humidity, constantly wet soil in the pots, good drainage, high temperature and shade. The flowers are worth working hard for. A night temperature of 40° or 50° will kill the leaves but not bulbs. Keep them warm.

We offer thrifty growing bulbs at \$1.50 each. This is much better than dry bulbs at a lower price.

Hippeastrums. Popularly known as "Amaryllis." The improved hybrids are among the most gorgeous of bulbs for winter blooming in pots as well as for the outside garden. The colors run from pure white to various tones in pink and red variously marked. You see rose, carmine, garnet, ruby, scarlet

and many other exquisite colors in the hybrids. Some have a very spicy fragrance.

The flowers are large, sometimes 8" or more in diameter but we have never believed in developing size at the expense of beauty. A flower can be too large to be graceful.

Culture. Pot the bulbs as soon as received. Use a rich porous loam containing plenty of humus. Screened, very old rotted manure is the best humus. Be sure of perfect drainage. Set the bulb half above the surface of soil in pots, just covered in outside garden. Potted bulbs should be in just slightly moist soil when set but given very little or no water until a bud appears. Set in a moderately warm room, in shade. When bud appears (which may be between January and March) water freely and bring into full light and about 50% sun. During periods of blooming and active growth water liberally and give some weak liquid manure. They can use a little Vigoro, ground sheep manure, or bone meal. Do not use too much strongly alkaline or strongly acid material as they like a soil about neutral. When growth seems to be completed, which should happen about September or October, gradually dry them off. It does not hurt if leaves mostly die. Some let them dry completely, some don't. For Christmas flowers force as much early growth as possible and give an early rest. After a two or three month rest they are usually ready to start.

Hippeastrums are delivered from November on when they are dormant.

Hippeastrum, assorted American Hybrids. All colors, mixed and include many reds. Don't ask for certain colors in this lot. 50c ea. \$5.00 per doz.

H. White Hybrids. These have the species "solandriflorum" in ancestry, and have a very spicy fragrance. Some are nearly white but usually lightly marked with pink. But the effect is white. \$1.00 each. \$10.00 per doz.

H. equestre. A lovely salmon pink. Give it poor sandy soil, no fertilizer. This encourages flowers instead of foliage and bulb increase. 35c ea. \$3.50 doz.

H. johnsonii. The oldest hybrid, still a favorite. It does best of any for outdoor planting in the south. Equally desirable in pots. Rich red with white stripe in center of petals. 50c ea. \$5.00 doz.

H. advenum, Oxblood Lily. This belongs to the subgenus Habranthus and this variety is often listed as **Habranthus miniatus**. Color ox-blood red. Blooms in September. Foliage dies and bulb rests thru the summer. Our bulbs will bloom at once if planted before October 1. They can't be held back longer so order at once. Plant 6" deep. 25c ea. \$2.25 doz.

H. advenum. Pink form of this species. 35c ea. \$3.50 doz.

Hymenocallis. Spider Lilies and Ismene. See our spring catalog for complete list.

H. calathina. The Ismene or Peruvian Daffodil is a well known favorite. They may be handled like glads, that is dug and stored in the fall. In the south they may be left in the ground for years. Plant from January to April. Delivery in the winter. We are offering these at a special price this fall to avoid storing a large crop. Winter to spring delivery. S. 10c ea. M. 15c. L. 20c. Extra large 35c. Six bulbs for the price of five.

H. sp. unknown. This is a small Spider Lily that can also be handled like glads in the north. Not a sure bloomer but very pretty. In the fall lift the roots too, and cover with dry soil. Winter to spring delivery. 25c ea. \$2.00 doz.

Hypoxis leptocarpa. Star grass. Plaited grass like leaves with small yellow flowers. Not showy but interesting to collectors. Rock garden or border. Half shade. 25c ea.

Leucojum. Snowflakes. Quite hardy everywhere. They bloom here nearly all winter even when the leaves freeze solid at night and in the north often before the snow is all gone. The dainty white flowers, with a dot of green on the tip of each petal is most acceptable in the garden or when cut. Plant 4" deep. In very cold climates give a thick winter mulch. L. 2 for 15c. 60c doz. 100 for \$4.00.

Lycorus are fall blooming. They are almost hardy in the north and would be entirely so in a cold frame in protected situation.

Lycorus aurea. Golden Spider Lily. Large umbel of rich yellow flowers, spidery in form. So beautiful you think your eyes must deceive you. Probably too late for flowers now. Delivery before October 15 only. L. \$2.00.

L. radiata. Red Spider Lily. Usually sold for Nerine sarniensis. Exquisitely beautiful. Deep coral pink spidery flowers. We dug the bulbs offered early. If planted before October 1, all should bloom. Maybe a little later, but order at once. 25c ea. Special 6 for \$1.00. 100 for \$12.00.

L. squamigera. Amaryllis Halli. This is perfectly hardy in the north as leaves do not grow until spring. Flowers are lilac to pink. Plant 5" deep and give winter mulch in north. \$1.00 ea.

Nerines are almost unknown in America. The bulb usually sold for Nerine sarniensis is really Lycorus radiata. All Nerines are lovely with their twisted petals and long stamens and pistil. They bloom in the fall. Do fine in pots or the garden. Bulbs planted now may or may not flower this fall but they will next fall so get them started.

Nerines, assorted hybrids. There are some fine ones in this lot on the order of Bowdeni. M. \$1.00 ea.

N. filifolia. A small bulb, with dainty, lovely flowers freely produced in the fall. Grass-like evergreen foliage. Move any time of year. Special. Small bulbs 15c ea. \$1.50 doz.

Pancratium maritimum. Flowers resemble the Ismene but distinct. Fragrant. A fine bulb for the south and middle south. Dormant in December when they should be moved. 25c ea. Special \$1.75 doz.

Sprekelia formosissima. Jacobean Lily. The gorgeous red flowers have long narrow petals, the three lowest rolled together to enclose the stamens and style and deflexed. This gives a somewhat orchid-like form. Flowers in spring but often aberrant. Culture like Hippeastrum. Fine in pots. Be sure to rest them. Hardy to N. Carolina and Washington D. C. Farther north, store like glads or grow in pots. L. 40c ea. \$4.00 dozen. Blooming size, 25c ea., \$2.50 doz.

Zephyranthes. Fairy Lilies or Rain Lilies. They are hardy in Texas, N. Carolina and around Washington, D. C. In the north dig in fall and store like glads. See our spring catalog for complete list. We have a very large stock of one which we offer at a special low price.

Zephyranthes candida. White. L. 50c doz. \$3.50 per 100. M. 25c doz. \$2.50 per 100.

LILACEAE

The Lily Family contains many bulbous plants besides the species *Lilium*, —or true lilies. Many call any bulb a "lily." It is incorrect, though popular, to say "Calla Lilies," "Crinum Lilies," etc. Members of this family include Onions, Garlic, Tulips, Hyacinths and many plants that appear widely different yet they are related. *Lilacea* and *Amaryllidaceae*, that is the Lily Family and the Amaryllis Family are rather closely related.

LILIUMS

Liliums, or true Lilies, have long been considered among the most beautiful and perfect of Nature's creations. So perfect in fact that the hybridizer has made little effort to improve them and that little has been unimportant compared to results with Roses, Hippeastrums, Iris, etc.

Culture. It is best to plant in late fall or winter soon after tops die. We deliver bulbs about December to January. Earlier to eastern customers. Plant 4 to 6" deep. Deep sandy loam is best soil. Use no manure around them. It is better to have a handful of sand under bulb and another around them. The varieties offered do quite well in full sun even in California but 25% to 50% shade is perhaps better especially mid-day shade. The ideal situation is among low shrubs or plants that shade the ground but allow the Lily tops to reach the sunlight. Lilies reverse a human trait, they like to have their heads warm but their feet cool. It is good to mulch the ground, and allowing the ground to bake in full exposure to sun is very bad, sometimes fatal. Keep moist.

Lilium elegans, var Best Red. 20c ea. 3 for 50c. Large 35c ea.

L. formosanum. Large white flowers. Very hardy and easy to grow. Bulbs small. 20c ea. 3 for 50c.

L. regale. Large, fragrant, white flowers suffused pink with creamy throat. Very hardy and easy. 15c ea. 4 for 50c. Large, 25c ea.

L. tenuifolium, **Golden Gleam**. Golden yellow. Easy to grow. Bulbs are small. 20c ea. 3 for 50c.

L. tigrinum. The true, well beloved, Tiger Lily. One of the hardest and best. Salmon-red spotted purplish black. 4 to 5 ft. 15c, 25c and 35c ea. 3 for 40c, 65c or \$1.00.

Gloriosa rothschildiana. Not a Lilium but close. Called Climbing Lily. Very gorgeous, lily-like, crimson flowers. Very rare.

Culture easy. It is best to plant in January. Start in pots in north before March 15 and in late spring shift to garden. Full sun exposure and sandy soil preferred. Planting depth 6". Delivery about January. One eye tubers, 60c ea.

DARWIN TULIPS

Our Tulips are Oregon grown. Better than imported.

These are all large bulbs, 1" in diameter and up. This size is best for bedding as the bulbs do not break up the first year into small bulbs as the "top size" does. We have had them bloom every year for five years without digging.

Culture. September, October and November are the best months for planting tulips. Bulbs planted in December do well usually. We have planted as late as March and over half bloomed. Too late planting gives shorter stems and smaller flowers.

Don't forget that tulips are growing under ground all winter, therefore in California you must water them if rains are late, even though they are not up.

Plant 4" deep (or deeper in cold climates) and 4" apart in good rich sandy loam preferably but any type of soil well enriched with old rotted manure will give excellent results.

These are mixed colors, named varieties of long stemmed, large flowering types—Darwins, Cottage and Breeders. These types do best in California. Preferable everywhere. They are similar in type and for the sake of brevity in our advertising we call them simply Darwin Tulips. No selection of colors may be made by purchaser. Accidental mixtures, lost labels and surplus are thus sold at one-half the usual price. We do not have tulips in separate colors or varieties. They cost about double our price.

Tulip Special. Forty large tulip bulbs for \$1.00. 100 for \$2.25; 500 for \$10.50; 1,000 for \$20.00.

HYACINTHS

They also belong in the Lily Family. The dense raceme thickly set with flowers is very popular for formal planting.

Culture. May be planted in early October but later planting will do, though stems are not so tall. Hyacinths are fussy about having plenty of time for root growth before tops start.

In the garden, in the north plant 6" deep to base of bulb 5" apart, and mulch when weather becomes cold. In the south, 4" is deep enough. Well enriched sandy loam is best soil but use no horse manure. Well decayed cow manure, leaf mold or peat is good. Sunny location is best. In a 5" pot set near surface and place in dark room or better still bury deep in ground, bringing gradually to light after 7 or 8 weeks, when sprout will be about 1 1/2" high. They may be grown also in hyacinth glasses, not touching water. Grow them in a room not over 70°.

Varieties. To avoid confusion and make you sure to get the best in each color we offer only one variety of each. **L'Innocence**, pure white. **Gertrude**, deep pink. **Roi Des Belges**, deep red. **Grand Maitre**, porcelain blue. **King of the Blues**, dark blue. **City of Haarlem**, golden yellow.

Price, all varieties, 15c ea. \$1.50 doz. Mixture, our selection, 25 for \$2.75.

ROMAN HYACINTHS

Roman Hyacinths require about the same treatment as Dutch Hyacinths except three instead of one may be planted in a 5" pot. They need not be planted so deep nor so far apart in the garden. They do better in the garden in California than the Dutch types.

Romans give several stems from each bulb instead of but one. They are much more graceful and desirable for cutting. Delightfully perfumed. Plant in full sun or slight shade.

Blue Roman Hyacinth, blooming size, 10c ea. \$1.00 doz. Very large bulbs, 15c ea. \$1.40 doz.

SCILLAS

They are closely related to Hyacinths in the Lily Family. Common names are Wild Hyacinth and Blue bell. They are choicest of early spring flowers. Fine for cutting. Culture very easy. Semi-shade or full sun. May remain in ground for years.

Tall unknown species. Makes a fine stem up to 3 ft. with blue flowers. 20c ea. Small 15c.

S. hispanica (campanulata). Small species with flowers almost like Roman Hyacinths, equally nice for cutting. May be grown in pots in the house. Likes part shade. Blue only. 6c ea. 50c doz.

MUSCARI

Muscari or Grape Hyacinths are the neatest and daintiest of early spring flowers. The raceme or spike resembles a small unbranched bunch of grapes. Culture very simple. Need not be disturbed for years and quite hardy.

There are many species, practically indistinguishable, so we have thrown them all into a mixture. All are lovely blue shades.

Muscari, assorted species, 5c ea. 40c doz. Small bulbs 25c doz.

M. Heavenly Blue. 10c ea. 75c doz.

Galtonia candicans. Summer Hyacinth. Four foot stem bearing 20 or more drooping, white bell-shaped flowers through a long season. Delivery late fall until spring. In cold climates dig and store in fall or plant deep and mulch heavily. 15c ea. \$1.00 doz.

Leucocoryne ixoides odorata. Glory of the Sun. Large, fragrant blue flowers with white throat in spring. Culture like Freesias. Plant 4" deep. Favorite for cutting, bringing a high price on flower markets. An exquisite flower, long lasting when cut. Pricing it extremely low, less in fact than the flowers sell for wholesale. Large bulbs 15c ea. \$1.50 doz. \$12 per 100.

Lachenalia or Cape Cowslips are little known but most desirable members of the Lily Family. The brilliant flowers may be kept in attractive condition two months or more and may be had from late November to February, depending on time of planting and variety. Tulip-like leaves. Flower stems 6 to 9" bearing up to 20 pendulous firecracker like flowers.

Culture. Plant in half sun in garden in south about 3" apart, 2" deep. They are fine for pots, boxes, etc., in the house and about 50° F. is right temperature at night but lower does not hurt them—they are not very tender. After they come up water freely. After flowering keep them growing until foliage turns yellow then keep them perfectly dry until August when they may be separated and repotted. They must have good drainage.

L. pendula superba. Brilliant coral red flowers tipped green and purple. Early, blooms for Christmas. 30c each. 5 (right for a 6" pot) for \$1.35.

L. Rector of Cawston. Flowers scarlet, citron and green. Leaves have red spots. Free flowering. Each 25c. 5 for \$1.00.

Allium neapolitanum. Umbel of white flowers resembling Paper Whites in early spring. A standard florist's flower often forced. 5c ea. 50c doz.

Allium sativum. A new variety. Long a favorite in gardens of southern Europe. Very fragrant, some might call it odorous. A scientist once said it made people live longer. A little goes a long way. Some like it, some don't. Burbank sold this 25 years ago as Elephant Garlic. Bulbs are huge, do not

break up much into cloves, but makes hard shelled bulblets at base. It may be a new species or one little known. Worth trying if you like garlic. 25c ea.

Brodiaea capitata. Called California Hyacinth. Violet blue. 12" to 18" high and up to 20 flower stems per bulb. Blooms in October so order at once. 10c ea. \$1.00 doz. (Our Brodeaeas are cultivated, not collected bulbs, larger and better, therefore cost more).

Brodiaea ixoides. Golden Star. Bright yellow flowers in spring. 10c ea. \$1.00 doz.

Broadiaea laxa. Ithuriel's Spear. Large umbel, bluish violet flowers on 2 ft. stem comparable to an Agapanthus. Spring flowering. 20c ea. \$1.75 doz.

Milla biflora. Estrellitas or Little Stars. Lovely stems of dainty, wax-like flowers. A faint stripe of green runs thru center of each petal on the outside. Delivery early winter. In the east dig and store bulbs over winter. Plant 4" deep, in full sun. 30c ea. \$2.75 per doz.

ORCHIDACEAE. (ORCHID FAMILY)

This plant family gives the most beautiful of flowers, so many think. This idea may be partly due to their rarity and the difficulty of their culture requirements. This has made them strictly a rich man's flower. But there are a few that can easily be grown in the garden. We offer one, *Bletilla*, of easy culture. Plant in loamy soil in half shade. Likes plenty of moisture. Plant about 3" deep from October to March. They are said to be hardy anywhere and to do well in pots. Late fall delivery.

Bletilla hyacintha. Orchid shaped flowers of exquisite mauve-violet that are lovely in corsages or small vases. Clumps 75c ea.

ARACEAE. (ARUMS, CALLAS, ETC.)

This family contains the so-called Calla Lilies or *Zantedeschia*, Black Callas and other Aroids.

Culture. All the *Zantedeschias* and *Arum palaestinum* are suitable for pot culture. *A. palaestinum* will start about September or later. Do not put this bulb into moist soil before that or it will rot. *Zantedeschias*, pink, yellow, spotted leaf and white callas may be potted by about December 15. Don't rush them as too much water before they start to grow may rot them. They may be held back and started in the spring. They all do well in the garden in a very moist semi-shaded place. They are not hardy in cold climates; dig in fall. The **White Calla** usually blooms in California in the garden in late winter. In pots it is an error to keep them growing continuously. If rested through summer you will be rewarded with flowers. A rest brings flowers when they start again.

Zantedeschia aethiopica, var. **Baby Calla**. This is the smallest and whitest Calla. Small enough for corsage. L. 35c; small 25c.

Z. aethiopa, var. **Godfrey Calla**. The best and most popular of dwarf Callas before "Baby" was introduced. Being twice as large as Baby makes it a "medium" size. This is so much more appropriate in size, freer in blooming and more desirable every way that we do not recommend the large type. 20c and 30c.

Z. Albo-maculata. The prettiest foliage of all and worth growing for that alone. **Special.** Small bulbs that may not bloom first year but I think they will with good culture—10c. Large 15c and 20c.

Z. elliotiana. Pure golden yellow flowers. 15c to 25c, all blooming size.

Z. rehmanni. The famous pink Calla. Colors vary from pink to rose red. The plant and flowers are small, growing only to about 12". 50c, 75c and extra large for \$1.00. The larger sizes bloom more surely for amateurs.

Amorphophallus rivieri. Large plant up to 4 ft., very decorative and tropical in appearance. Flower often 3 ft. long, rich chocolate dotted with red. Carrion odor. Bulbs do not bloom until very large. Small \$1.00 up to large \$4.00.

Arum italicum. The dark green leaves are attractively lined with very

light green, almost white. No bad odor. Flower very odd ivory white. Hardy. Plant in fall or early spring. S. 15c. Blooming size 25c. Very large 50c.

A. palaestinum. Solomon's Lily or Black Calla. Winter growing and the only Arum fit for pots. Plant and flower looks like a Calla but the flower is really black. It has no disagreeable odor like some Arums. Blooming size 35c, very large 75c. Must be ordered early as they cannot be held back very long.

Dracunculus vulgaris. A gorgeous tropical appearing plant and flower. The flower has very disagreeable odor when first open. May be planted in the spring in the east to a depth of 8" or more and will live over winter safely. S. 25c. M. 50c. L. 75c ea.

Sauromatum venosum. Rich tropical foliage. Leaf petioles spotted. The spathe of the flower is 16" long, one inch wide, yellow with purple-black spots. Lies on the ground, hence the name "lizard." Hardy. Plant large bulbs 6" deep. S. 15c. M. 30c. L. 50c.

RANUNCULACEAE

This family includes **Ranunculus** and **Anemones**. They are both very useful for cutting, a standard in flower shops, and give a riot of color in the garden. Ranunculus range in color from red through pink to white, tones of yellow to deepest gold. But no blue. The flowers are very double when well grown. Some are shaped like roses others like camellias or round as a ball.

Anemones are richest in blues and reds to white, but no yellow. The best are semi-double, though sometimes fully double.

One can get more beauty and more rich colors for the money from these bulbs than from any other source. See the letter from Arizona Temple under "Alibis."

Culture. They may be planted the year around except those flowering from July to September in Southern California are likely to meet weather too hot. They like cool weather and are ideal winter bloomers here. Bloom in 10 or 12 weeks from planting. Plant in September for Christmas flowers. He, one can plant in succession from August to April 1. A little shade when hot full sun in winter is best.

The best soil is a rich sandy loam. Use no fresh manure, only rotted and screened or leaf mold should be spaded in. Plant one inch deep, 3" apart, rows 12" apart.

We do not list large bulbs. Size #3 are preferable. The #1 bulbs make several stems per bulb that are too close to give as good flowers as the single stems from a #3 bulb. The latter make as long stems and better flowers. Since they cost only one-fourth as much, they are best for outside planting.

Ranunculus. Mixed colors. 15c doz. 100 for \$1.00. 500 for \$4.00. 1,000 for \$7.50.

Ranunculus. "Gold," all pure rich yellow colors. These are extra fine selected colors. The bulbs are smaller but bloom well. 15c doz. 100 for \$1.00. 500 for \$4.00. 1,000 for \$7.50.

Anemones. Mixed colors. 15c doz. 100 for \$1.00. 500 for \$4.00. 1,000 for \$7.50.

Anemones. His Majesty, red and Blue Poppy, blue, either variety, 25c doz. 100 for \$1.50.

OXALIDACEAE

Oxalis, to you and me. Bright cheerful flowers for the garden or pots, that close at night and on cloudy days. In the garden plant about 2" deep, in pots 1" and about 3 to 5" pot. Long season of bloom, early spring to mid-summer.

Oxalis cernua, Bermuda Buttercup. Rich yellow flowers on tall stems. They make a rich display. 3 for 10c. 12 for 35c. \$2.50 per 100.

O. Grand Duchess. Lavender, white, pink or mixed. 3 for 10c. 12 for 35c. \$2.50 per 100.

SEEDS

Many like to grow their bulbs from seed. The seedlings of hybrids will be variable. Seedlings of species will come true to name. Most of these seeds are ripe but not all. They will be sent as soon as ripe. We can't acknowledge small seed orders. Don't worry, they will come when ripe.

Directions. Plant Clivias and Crinums on top of wet soil in shade. The others should be planted from $\frac{1}{2}$ " to 1" deep. Plant as soon as received. Some are good only for a few weeks. Plant in pans or in outside garden. Soil should be rich sandy loam with liberal addition of humus. If top of ground is covered with burlap until plants begin to come up it will help to avoid washing soil from seed. Keep wet all the time. Spray gently. Give rather less sun exposure than advised for mature plants.

The seedlings bloom in from two years (Iris, Glads, etc.) to six or seven (Clivias). Some seed may not start for several months as with Iris.

The price of all packets is 25c each. The number of seed varies from one Clivia seed up. Usually you get from a level to a heaping teaspoon. In some cases quantity is stated in parenthesis, thus (12).

Amaryllidaceae—

Agapanthus, Blue Lily of the Nile.

Alstromeria aurantiaca lutea.

Clivia Hybrids (1).

Cooperia pedunculata.

Crinum moorei (5). **C. capense** (4).

Hippeastrum, white (12), assorted (15).

H. advenum, light, dark. **H. robustum**.

Zephyranthes, ajax, texana, candida.

Iridaceae—

Bearded Iris hybrids.

Iris spurea aurea and aurea hybrids.

I. spuria ochroleuca.

I. Louisiana species.

Gladiolus hybrids.

Galtonia candicans.

Morea iridioides.

Watsonia hybrids, assorted colors.

Ranunculaceae—

Anemone hybrids.

Ranunculus hybrids.

Araceae—

Arum palaestinum.

Dracunculus vulgaris.

Zantedeschia aethiopica, Godfrey.

Z. rehmanni.

Avocado Fruit. Avocados will begin to ripen about Sept. 1. We will ship fruit to any part of U. S. in \$1.00 lots, post paid. You will get $2\frac{1}{2}$ to 5 lbs. depending on cost of postage. When fruit is soft use for spread or in salads. Wonderfully rich in vitamins.